

Guifre Vidal

List of Publications by Year in descending order

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53
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147801

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docs citations

53
times ranked

3502
citing authors

#	ARTICLE	IF	CITATIONS
1	Multiboundary generalization of thermofield double states and their realization in critical quantum spin chains. <i>Physical Review B</i> , 2022, 105, .	3.2	5
2	Collisions of False-Vacuum Bubble Walls in a Quantum Spin Chain. <i>PRX Quantum</i> , 2022, 3, .	9.2	20
3	Entanglement renormalization for gauge invariant quantum fields. <i>Physical Review D</i> , 2021, 103, .	4.7	4
4	Determining topological order from infinite projected entangled pair states. <i>Physical Review B</i> , 2020, 101, .	3.2	7
5	Conformal Fields and Operator Product Expansion in Critical Quantum Spin Chains. <i>Physical Review Letters</i> , 2020, 124, 040604.	7.8	23
6	Emergence of conformal symmetry in quantum spin chains: Antiperiodic boundary conditions and supersymmetry. <i>Physical Review B</i> , 2020, 101, .	3.2	12
7	Continuous matrix product states for nonrelativistic quantum fields: A lattice algorithm for inhomogeneous systems. <i>Physical Review B</i> , 2018, 98, .	3.2	12
8	Conformal Data and Renormalization Group Flow in Critical Quantum Spin Chains Using Periodic Uniform Matrix Product States. <i>Physical Review Letters</i> , 2018, 121, 230402.	7.8	32
9	Continuous Matrix Product States for Quantum Fields: An Energy Minimization Algorithm. <i>Physical Review Letters</i> , 2017, 118, 220402.	7.8	26
10	Universal edge information from wave-function deformation. <i>Physical Review B</i> , 2017, 95, .	3.2	2
11	Extraction of conformal data in critical quantum spin chains using the Koo-Saleur formula. <i>Physical Review B</i> , 2017, 96, .	3.2	29
12	Entanglement and correlations in the continuous multi-scale entanglement renormalization ansatz. <i>Journal of High Energy Physics</i> , 2017, 2017, 1.	4.7	13
13	Tensor network quotient takes the vacuum to the thermal state. <i>Physical Review B</i> , 2016, 94, .	3.2	35
14	Topological conformal defects with tensor networks. <i>Physical Review B</i> , 2016, 94, .	3.2	38
15	Explicit construction of local conserved operators in disordered many-body systems. <i>Physical Review B</i> , 2016, 94, .	3.2	40
16	Fast convergence of imaginary time evolution tensor network algorithms by recycling the environment. <i>Physical Review B</i> , 2015, 91, .	3.2	29
17	Lieb-Liniger model with exponentially decaying interactions: A continuous matrix product state study. <i>Physical Review B</i> , 2015, 92, .	3.2	19
18	Constructing local integrals of motion in the many-body localized phase. <i>Physical Review B</i> , 2015, 91, .	3.2	224

#	ARTICLE	IF	CITATIONS
19	Matrix product states for anyonic systems and efficient simulation of dynamics. Physical Review B, 2014, 89, .	3.2	14
20	Entanglement contour. Journal of Statistical Mechanics: Theory and Experiment, 2014, 2014, P10011.	2.3	54
21	Entanglement negativity and topological order. Physical Review A, 2013, 88, .	2.5	85
22	Quantum Criticality with the Multi-scale Entanglement Renormalization Ansatz. Springer Series in Solid-state Sciences, 2013, , 99-130.	0.3	18
23	Dynamical windows for real-time evolution with matrix product states. Physical Review B, 2013, 88, .	3.2	10
24	Global symmetries in tensor network states: Symmetric tensors versus minimal bond dimension. Physical Review B, 2013, 88, .	3.2	26
25	Tensor network states and algorithms in the presence of a global SU(2) symmetry. Physical Review B, 2012, 86, .	3.2	72
26	Perfect sampling with unitary tensor networks. Physical Review B, 2012, 85, .	3.2	70
27	Translation invariance, topology, and protection of criticality in chains of interacting anyons. Physical Review B, 2012, 86, .	3.2	25
28	Variational Monte Carlo with the multiscale entanglement renormalization ansatz. Physical Review B, 2012, 85, .	3.2	15
29	Infinite boundary conditions for matrix product state calculations. Physical Review B, 2012, 86, .	3.2	63
30	Stripes in the two-dimensional t - J model with infinite projected entangled-pair states. Physical Review B, 2011, 84, .	3.2	160
31	Tensor network states and algorithms in the presence of a global U(1) symmetry. Physical Review B, 2011, 83, .	3.2	175
32	Simulation of strongly correlated fermions in two spatial dimensions with fermionic projected entangled-pair states. Physical Review B, 2010, 81, .	3.2	220
33	Simulation of interacting fermions with entanglement renormalization. Physical Review A, 2010, 81, .	2.5	108
34	Simulation of fermionic lattice models in two dimensions with projected entangled-pair states: Next-nearest neighbor Hamiltonians. Physical Review B, 2010, 82, .	3.2	63
35	Simulation of one-dimensional quantum systems with a global SU(2) symmetry. New Journal of Physics, 2010, 12, 033029.	2.9	39
36	Explicit tensor network representation for the ground states of string-net models. Physical Review B, 2009, 79, .	3.2	100

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37	Entanglement growth and simulation efficiency in one-dimensional quantum lattice systems. Physical Review A, 2008, 78, .	2.5	33
38	Simulation of time evolution with multiscale entanglement renormalization ansatz. Physical Review A, 2008, 77, .	2.5	38
39	Ground State Fidelity from Tensor Network Representations. Physical Review Letters, 2008, 100, 080601.	7.8	152
40	Role of entanglement and correlations in mixed-state quantum computation. Physical Review A, 2007, 75, .	2.5	219
41	Mixed-State Dynamics in One-Dimensional Quantum Lattice Systems: A Time-Dependent Superoperator Renormalization Algorithm. Physical Review Letters, 2004, 93, 207205.	7.8	474
42	Efficient Simulation of One-Dimensional Quantum Many-Body Systems. Physical Review Letters, 2004, 93, 040502.	7.8	1,231
43	Efficient Classical Simulation of Slightly Entangled Quantum Computations. Physical Review Letters, 2003, 91, 147902.	7.8	1,595
44	Optimal local preparation of an arbitrary mixed state of two qubits: Closed expression for the single-copy case. Physical Review A, 2000, 62, .	2.5	18
45	Optimal estimation of two-qubit pure-state entanglement. Physical Review A, 2000, 61, .	2.5	27
46	Approximate transformations and robust manipulation of bipartite pure-state entanglement. Physical Review A, 2000, 62, .	2.5	96
47	Operational criterion and constructive checks for the separability of low-rank density matrices. Physical Review A, 2000, 62, .	2.5	124
48	Entanglement monotones. Journal of Modern Optics, 2000, 47, 355-376.	1.3	574
49	Entanglement monotones. Journal of Modern Optics, 2000, 47, 355-376.	1.3	79
50	Robustness of entanglement. Physical Review A, 1999, 59, 141-155.	2.5	445
51	Entanglement of Pure States for a Single Copy. Physical Review Letters, 1999, 83, 1046-1049.	7.8	300
52	Local description of quantum inseparability. Physical Review A, 1998, 58, 826-830.	2.5	160
53	Classical Simulations of Quantum Field Theory in Curved Spacetime I: Fermionic Hawking-Hartle Vacua from a Staggered Lattice Scheme. Quantum - the Open Journal for Quantum Science, 0, 4, 351.	0.0	3